UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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## NOTICE OF ALLOWANCE AND FEE(S) DUE

22971 7590 05/13/2008
MICROSOFT CORPORATION
ONE MICROSOFT WAY
REDMOND, WA 98052-6399

EXAMINIER
HICKS, MICHAEL J
ART UNIT PAPER NUMBER

2165 DATE MAILED: 05/13/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/813,963	03/31/2004	Surajit Chaudhuri	307523.01	5889		
TITLE OF INVENTION: OUERY PROGRESS ESTIMATION						

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APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	08/13/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

## PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	form should be used I correspondence including d below or directed off ions	or tran	smitting the ISSU Patent, advance of in Block 1, by (a	JE FEE and PUBLIC rders and notification i) specifying a new o	of n	ON FEE (if requi naintenance fees w pondence address;	ired). I /ill be and/or	Blocks 1 through 5 sh mailed to the current (b) indicating a sepa	ould be completed where correspondence address as ate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.					
22971	7590 05/13	/2008			nave			of Mailing or Transi	
MICROSOFT CORPORATION ONE MICROSOFT WAY REDMOND, WA 98052-6399					I hereby certify that this Fee(s) Transmittal is being deposited with the U States Postal Service with sufficient postage for first class mail in an env addressed to the Mail Stop ISSUE FEE address above, or being facs transmitted to the USPTO (571) 273-2885, on the date indicated below.				denosited with the United
					Г				(Depositor's name)
									(Signature)
									(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVEN	TOR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/813,963	03/31/2004			Surajit Chaudhur	i			307523.01	5889
TITLE OF INVENTION	QUERY PROGRESS	ESTIM	ATION						
APPLN, TYPE	SMALL ENTITY	IS	SUE FEE DUE	PUBLICATION FEE D	UE	PREV. PAID ISSUE	S FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO		\$1440	\$300		\$0		\$1740	08/13/2008
EXAM	INER		ART UNIT	CLASS-SUBCLASS	3				
HICKS, MI	CHAEL J		2165	707-003000					
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A	ondence address (or Cha 1/122) attached. cation (or "Fee Address 2 or more recent) attach ND RESIDENCE DAT. ces an assignee is ident in 37 CFR 3.11. Comp	nge of "Indicated. Use	Correspondence ation form e of a Customer		ip to mativ single or a attor II be or typ he pa	3 registered paten ely, e firm (having as a gent) and the name neys or agents. If o printed. e)	memb es of u no nam	er a 2p to p to ee is 3	cument has been filed for
Please check the appropri	ate assignee category or	catego	ories (will not be pr	inted on the patent):	۵	Individual Co	orporati	on or other private gro	up entity Government
4a. The following fee(s) are submitted:    Issue Fee   Publication Fee (No small entity discount permitted)   Advance Order - # of Copies			ed)	Apparent of Fee(s): (Please first reapply any previously paid issue fee shown above)      A check is enclosed.      Payment by credit card. Form PTO-2038 is attached.      The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).					
	SMALL ENTITY state	ıs. See	37 CFR 1.27.					ITTY status. See 37 CF	
interest as shown by the r	Publication Fee (if req ecords of the United Sta	uired) v tes Pat	will not be accepted ent and Trademark	d from anyone other the Office.	han ti	ne applicant; a regi	stered a	ittorney or agent; or th	e assignee or other party in
Authorized Signature				Date					
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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010. OMB 0651-0033



## UNITED STATES PATENT AND TRADEMARK OFFICE

#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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10/813,963	03/31/2004	Surajit Chaudhuri	307523.01	5889	
22971	590 05/13/2008		EXAMINER		
MICROSOFT C	ORPORATION	HICKS, MICHAEL J			
ONE MICROSOF		ART UNIT PAPER NUMBER			
REDMOND, WA	98052-6399	2165			

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 471 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 471 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## Notice of Allowability

Application No.	Applicant(s)				
10/813,963	CHAUDHURI ET AL.				
Examiner	Art Unit				
Michael J. Hicks	2165				

-- The MALING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS is (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to 2/21/2008.
- The allowed claim(s) is/are 17,18,21-35,44 and 47-71.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All b) Some\* c) None of the:
    - 1. \( \subseteq \text{ Certified copies of the priority documents have been received.} \)
    - 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_
    - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDOMMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) Thereto or 2) to Paper No./Mail Date
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2. 
  Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. X Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. ☐ Other .

Application/Control Number: 10/813,963

Art Unit: 2165

## DETAILED ACTION

Claims 17-18, 21-35, 44, and 47-71 Pending.
 Claims 1-16, 19-20, 36-43, and 45-46 Canceled.

## EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Pablo Tapia on 5/5/2008.

The Claims filed 2/21/2008 have been amended as follows:

- a) In Line 13 of Claim 23, after "user" delete '; and' and insert -- by--
- b) In Line 1 of Claim 24, after "claim" delete '3' and insert --23--
- c) In line 1 of Claim 35, after "readable" insert --storage--

## Response to Arguments

 Applicant's arguments, see arguments, filed 2/21/2008, with respect to Claims 17-18, 21-35, 44, and 47-71 have been fully considered and are persuasive. The rejection of Claims 17-18, 21-35, 44, and 47-71 has been withdrawn. Application/Control Number: 10/813,963 Page 3

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## Allowable Subject Matter

Claims 17-18, 21-35, 44, and 47-71 allowed.

5. The following is an examiner's statement of reasons for allowance:

As per Claims 17 and 23, the prior art of record neither teaches nor suggests the limitation of preventing decreasing progress estimations from being displayed to the user by maintaining upper bounds on the total work to be performed.

As per Claims 44 and 47, the prior art of record neither teaches nor suggests the limitation of a tuple spill indicator that alerts a user when tuples spill to disk during query execution.

All other claims depend from one of Claims 17, 23, 44, and 47.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Points of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Hicks whose telephone number is (571) 272-2670. The examiner can normally be reached on Monday - Thursday 9:00a - 7:30p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christian Chace can be reached on (571) 272-4190. The

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Art Unit: 2165

fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael J Hicks Art Unit 2165 Phone: (571) 272-2670 Fax: (571) 273-2670

/Christian P. Chace/

Supervisory Patent Examiner, Art Unit 2165